AMENDMENTS TO THE CLAIMS

Claim 1 (canceled)

Claim 2 (currently amended): [[The]]An optical pick-up apparatus ~~of claim 1, comprising:~~

a light source for emitting laser light in two wavebands;

a light-receiving element for receiving laser light which is emitted from the light source and is reflected by an optical recording medium; and

a diffraction grating having polarization characteristics between the light source and the optical recording medium by which the laser light emitted from the light source and being incident is transmitted without diffraction when a polarization direction for the laser light is equal to a predetermined first polarization direction and also by which the laser light emitted from the light source and being incident is diffracted when a polarization direction for the laser light is equal to a predetermined second polarization direction,

the optical pick-up apparatus performing at least one of processes for reading information of the optical recording medium and recording information on the optical recording medium by irradiating the optical recording medium by the laser light emitted from the light source on the optical recording medium, and

the polarization directions of the laser lights in the two wavebands being orthogonal with each other on a position on which the laser light is incident on the diffraction grating,

wherein the light source emits the first and second polarization directional laser lights which are parallel to each other, and a half wavelength plate is arranged between the diffraction grating and the light source so as not to have an effect on a polarization direction for the second polarization directional laser light and so as to change a polarization direction for the first polarization directional laser light.

Claim 3 (currently amended): [[The]]An optical pick-up apparatus ~~of claim 1, further comprising a first optical assembly, including,~~ comprising:

a light source for emitting laser light in two wavebands;

a light-receiving element for receiving laser light which is emitted from the light source and is reflected by an optical recording medium; and

a diffraction grating having polarization characteristics between the light source and the optical recording medium by which the laser light emitted from the light source and being incident is transmitted without diffraction when a polarization direction for the laser light is equal to a predetermined first polarization direction and also by which the laser light emitted from the light source and being incident is diffracted when a polarization direction for the laser light is equal to a predetermined second polarization direction,

~~a first~~an optical assembly, the optical assembly including an optical element, disposed between the light source and the optical recording medium, provided with a hologram for diffracting incident light on a first surface portion and spectrally splitting the incident light to a plurality of lights and provided with the diffraction grating on a second surface portion, and

a light source unit having the light source and the light-receiving element[[.]],

the hologram having polarization characteristics by which diffraction efficiency for laser light in the predetermined first polarization direction is greater than diffraction efficiency for laser light in the predetermined second polarization direction,

the optical pick-up apparatus performing at least one of processes for reading information of the optical recording medium and recording information on the optical recording medium by irradiating the optical recording medium by the laser light emitted from the light source on the optical recording medium, and

the polarization directions of the laser lights in the two wavebands being orthogonal with each other on a position on which the laser light is incident on the diffraction grating.

Claim 4 (original): The optical pick-up apparatus of claim 3, wherein the hologram of the first optical element is a polarizing hologram having polarization characteristics by which the laser light emitted from the light source and being incident on the hologram is not diffracted and is transmitted.

Claim 5 (currently amended): [[The]]An optical pick-up apparatus ~~of claim 1, further~~ comprising ~~a second optical assembly, including,~~:

a ~~second optical~~ light source for emitting laser light in two wavebands;

a light-receiving element for receiving laser light which is emitted from the light source and is reflected by an optical recording medium; and

a diffraction grating having polarization characteristics between the light source and the optical recording medium by which the laser light emitted from the light source and being incident is transmitted without diffraction when a polarization direction for the laser light is equal to a predetermined first polarization direction and also by which the laser light emitted from the light source and being incident is diffracted when a polarization direction for the laser light is equal to a predetermined second polarization direction,

an integrated hologram element, disposed between the light source and the optical recording medium, provided with a hologram for diffracting incident light on a first surface portion and spectrally splitting the incident light to a plurality of lights [[and]], also provided with the diffraction grating on a second surface portion, and also provided with a half-wavelength plate, wherein the half-wavelength plate is arranged between the hologram and the diffraction grating, and

a light source unit having the light source and the light-receiving element[[.]],

the optical pick-up apparatus performing at least one of processes for reading information of the optical recording medium and recording information on the optical recording medium by irradiating the optical recording medium by the laser light emitted from the light source on the optical recording medium, and

the polarization directions of the laser lights in the two wavebands being orthogonal with each other on a position on which the laser light is incident on the diffraction grating.

Claim 6 (currently amended): A semiconductor laser apparatus comprising:

a light source for emitting laser light in a plurality of wavebands and installed so that polarization directions of a plurality of laser lights emitted therefrom are ~~can be~~ parallel to each other;

an optical axis conversion mirror for changing a traveling direction of laser light emitted from the light source and ~~provided with~~ having a half wavelength plate for changing a polarization direction for laser light in one of wavebands mounted on a mirror surface of the optical axis conversion mirror; and

a light-receiving element for receiving reflected light of laser light which is emitted from the light source and is transmitted in one direction.

Claim 7 (original): The semiconductor laser apparatus of claim 6, wherein the half wavelength plate is a birefringent crystal thin plate.

Claim 8 (original): The semiconductor laser apparatus of claim 6, wherein the half wavelength plate is an anisotropic resin film.

Claim 9 (original): The semiconductor laser apparatus of claim 6, wherein the light source and the light-receiving element are mounted on a resin base provided with a lead.

Claim 10 (original): The semiconductor laser apparatus of claim 6, wherein the light source and the light-receiving element are mounted on a metal pedestal, a lead kept under a condition electrically insulated from the pedestal is attached to the pedestal, and the lead is arranged so as to extend in a direction parallel to a direction of an optical axis converted by the optical axis conversion mirror.

Claim 11 (original): The semiconductor laser apparatus of claim 6, wherein the light source and the light-receiving element are mounted on a silicon substrate.

Claim 12 (original): The semiconductor laser apparatus of claim 11, wherein the optical axis conversion mirror is formed by processing the silicon substrate.

Claim 13 (currently amended): [[The]]A semiconductor laser apparatus ~~of claim 6, further~~ comprising:

a light source for emitting laser light in a plurality of wavebands and installed so that polarization directions of a plurality of laser lights emitted therefrom can be parallel to each other;

an optical axis conversion mirror for changing a traveling direction of laser light emitted from the light source and provided with a half wavelength plate for changing a polarization direction for laser light in one of wavebands; and

a light-receiving element for receiving reflected light of laser light which is emitted from the light source and is transmitted in one direction; and

a polarization diffraction grating having polarization characteristics by which diffraction efficiency for laser light in a predetermined first polarization direction is greater than diffraction efficiency for laser light in a second polarization direction orthogonal to the first polarization direction.

Claim 14 (currently amended): [[The]]A semiconductor laser apparatus ~~of claim 6, further~~ comprising:

a light source for emitting laser light in a plurality of wavebands and installed so that polarization directions of a plurality of laser lights emitted therefrom can be parallel to each other;

an optical axis conversion mirror for changing a traveling direction of laser light emitted from the light source and provided with a half wavelength plate for changing a polarization direction for laser light in one of wavebands; and

a light-receiving element for receiving reflected light of laser light which is emitted from the light source and is transmitted in one direction; and

a hologram for diffracting reflected light of laser light transmitted in one direction into a direction of the light-receiving element,

the hologram having polarization characteristics by which diffraction efficiency for laser light in a predetermined first polarization direction is greater than diffraction efficiency for laser light in a second polarization direction orthogonal to the first polarization direction.

Claim 15 (new): A semiconductor laser apparatus comprising:

a light source for emitting laser light in a plurality of wavebands and installed so that polarization directions of a plurality of laser lights emitted therefrom are parallel to each other;

a beam splitter for changing a traveling direction of laser light emitted from the light source;

a half wavelength plate for changing a polarization direction for laser light in one of wavebands, wherein the half-wavelength plate is disposed between the light source and the beam splitter; and

a light-receiving element for receiving reflected light of laser light which is emitted from the light source and is transmitted in one direction